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10/065,357

10/08/2002

Hatem Belfadhel

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01/11/2005

FRANK A. SMITH
GENERAL ELECTRIC COMPANY
ONE PLASTICS AVE
PITTSFIELD, MA 01201

EXAMINER

BOYKIN, TERRESSA M

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,357

Applicant(s)

BELFADHEL ET AL.

Examiner

Terressa M. Boykin

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1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☒ Claim(s) 13, 17, 21 and 25 is/are rejected.
- 7) ☒ Claim(s) 14-16, 18-20, 22-24 and 26-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-12-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13, 17, 21 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 3847805 see abstract, figure 1, cols. 4 –6 and claims 1, 2 and 3.

USP 3847805 discloses an ion exchange vessel containing ion exchange resin comprising a distribution means, liquid supply means connected to said distribution means for providing upward service flow, a collection means positioned above said distribution means, liquid supply means connected to said collection means for selectively providing downward liquid flow, said distribution means comprising unscreened apertured distribution means for both supplying said upward service flow and for removing resin from said vessel when said downward liquid flow is being selectively provided through said vessel and draining means comprising a screened lower drain for selectively draining liquid from said vessel without the removal of any substantial amount of resin from said vessel, said distribution means comprises a hollow hub which protrudes upwardly through the center of the bottom of said vessel and a plurality of hollow radially extending unscreened apertured laterals which are in

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fluid communication with said hub, said hub having a plurality of unscreened holes therein which extend circumferentially around said hub adjacent the area where said hub protrudes through the bottom of said vessel.

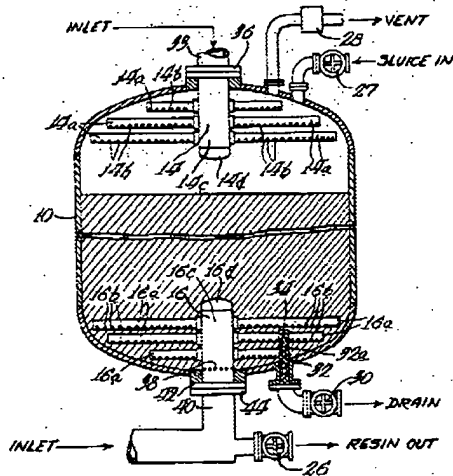


FIG. 1 is a schematic cross-sectional illustration that shows a condensate polishing ion exchange vessel utilizing the present invention.

Thus the reference and upflow reactor and distributor discloses a prepared from the same components as claimed by applicants. Thus in view of the above, there appears to be no significant difference between the reference and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is unpatentable.

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Objected Claims

Claims 18-20, 14-16, 22-24, 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Correspondence

Please note that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Applicants may be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terressa Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday from 6:30am to 3:00pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The general information number for listings of personnel is (571-272-1700).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tmb

**Examiner Terressa Boykin
Primary Examiner
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Allowable Subject Matter

The following is an Examiner's statement of reasons for the indication of allowable subject matter:

Applicant(s) claimed invention is directed to an upflow reactor for producing dihydroxy compounds comprising a vessel, a catalyst bed, a reactant distribution, a distributor and a first screen disposed and a collector; a method for producing a dihydroxy compound in an upflow reactor; a method for reducing the amount of catalyst bead carryover from a bed of catalyst beads in an upflow reactor; and a method of manufacturing of a polycarbonate.

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The crux of the invention lies in the discovery that the particular upflow reactor method above produces a high quality product and as well as a high yield while remaining remains cost effective and while avoiding the problems commonly associated therewith such as inefficient contact of the reactants with the catalyst, hindrance of the operation of packed-bed reactors, low product yield, premature replacement of catalyst beds and inefficient use of the reactant and cost deficiency. Such has neither been anticipated by nor made obvious from the prior art. For example, USP 6309553 discloses a phase separator, upflow reactor apparatuses and methods for separating phases. The phase separator includes a first separation unit and a second separation unit, each of which has walls defining a coagulation area. The separator also includes a plurality of parallel plates spaced from each other and vertically and horizontally inclined which each have a lower edge. Further, USP 6554994 discloses a reactor system and process for hydrotreating a heavy feedstock contaminated with metals sulfur and carbon residue using an upflow fixed bed reactor with at least two catalyst layers having different hydrogenation activity. Lastly, USP 5985135 discloses a hydro-processing method for removing impurities from a feed comprising a hydro carbonaceous liquid further comprising at least one concurrent, upflow hydro-processing reaction stage, a vapor-liquid contacting stage and a downflow- hydroprocessing reaction stage. Consequently, the art of record demonstrates other upflow reactors processes in the art which do not, however, anticipates nor make obvious the particular upflow reactor for producing dihydroxy compounds as claimed by applicants invention nor does the prior art contain the advantages as mentioned or avoid the problems commonly associated with upflow reactors.

Any comments considered necessary by applicant must be submitted no later

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than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Terressa Boykin, via the receptionist whose telephone number is (703) 308-2351. The examiner can normally be reached on Monday through Friday from 8:00a.m.-5:30 p.m.

tmb


Examiner Terressa Boykin
Primary Examiner